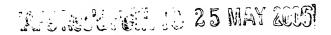
IAP15 Rec'd PCT/PTO 25 MAY 2006

PTO-1390 (Rev. 07-2004) Approved for use through 3/31/2007. OMB 0651-0021

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INTERNATIONAL APPLICATION NO. PCT/GB2004/004383 18 October 2004 (18.10.2004) 26 November 2003 (26.11.2003) TITLE OF INVENTION Apparatus and Methods for Distributed Temperature Sensing APPLICANT(S) FOR DO/EO/US Arthur H. Hartog, et al. Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information: This is a FIRST submission of items concerning a submission under 35 U.S.C. 371. This is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371. This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below. The US has been elected (Article 31). A copy of the International Application as filed (35 U.S.C. 371(c)(2)) a. is attached hereto (required only if not communicated by the International Bureau). has been communicated by the International Bureau. c. is not required, as the application was filed in the United States Receiving Office (RO/US). 6. 🔲 An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)). is attached hereto. b. has been previously submitted under 35 U.S.C. 154(d)(4). 7. 🗸 Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)) are attached hereto (required only if not communicated by the International Bureau). have been communicated by the International Bureau. have not been made; however, the time limit for making such amendments has NOT expired. have not been made and will not be made. An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)). An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)). An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)). Items 11 to 20 below concern document(s) or information included: An Information Disclosure Statement under 37 CFR 1.97 and 1.98. An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included. 12. 13. A preliminary amendment. An Application Data Sheet under 37 CFR 1.76. A substitute specification. A power of attorney and/or change of address letter. A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825. 18 A second copy of the published International Application under 35 U.S.C. 154(d)(4). A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4). 20. 🗸 Other items or information: Postcard

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND/FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



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U.S. APPLICATION N	PPLICATION NO. (if known, see 37 CFR 1.5) INTERNATIONAL APPLICATION NO. PCT/GB2004/004383		PPLICATION NO.	ATTORNEY'S DOCKET NUMBER	
<u>I</u> U			4/004383	101.0170US/PCT	
21. The following fees are submitted:				CALCULATIONS	PTO USE ONLY
BASIC NATIONAL FEE (CFR 1.492(a)(1)—(5)):					
Neither international preliminary examination fee (37 CFR 1.482)					
nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO					
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO\$920.00					
International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO					
International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4)					
International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4)				\$ 920.00	
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	25 - 20 =	5	X \$18.00	\$ 90.00	
Independent claims	1 -3=	0	X \$86.00	\$ 0.00	
MULTIPLE DEPENDE	NT CLAIM(S) (if applicable)		+ \$290.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 90.00	
Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				\$,
SUBTOTAL =				\$ 1,010.00	
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$ 1,010.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
TOTAL FEES ENCLOSED =				\$ 1,010.00	
				Amount to be refunded:	\$
				Amount to be charged:	\$ 1,010.00
a. A check in the amount of \$ to cover the above fees is enclosed.					
b. Please charge my Deposit Account No. 50-2475 in the amount of \$ 1,010.00 to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-2475. A duplicate copy of this sheet is enclosed.					
d. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.					
NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status.					
SEND ALL CORRESPONDENCE TO:					
Wayne Kanak				> /	
Sensor Highway Limited SIGNATURE				7	
Gamma House, E	Interprise Road	way			
Chilworth Science	Park		NAME		
Southampton, Hai	mpshire SO16 7NS		50,312		ay 24, 2006
United Kingdom REGISTRATION NUMBER					

'AP9 Rec'd PCT/PTO 25 MAY 2006

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Arthur H. Hartog, et al.

Attorney Docket No.:

101.0170US/PCT

Serial No.:

Art Unit:

Filed:

Examiner:

For:

Apparatus and Methods for Distributed Temperature Sensing

Mail Stop PCT Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

CERTIFICATE OF MAILING

I hereby certify that the attached U.S. patent application, consisting of:

- 1. Transmittal Letter (1 page);
- 2. Fee Calculation Sheet (1 page in duplicate);
- 3. Copy of the International Application as filed (Description and Claims) with Formal Drawings (35 pages total);
- 4. Power of Attorney (1 page)

is being deposited with the United States Postal Service as Express Mail No. EV 335955426 US in an envelope addressed to: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Rhonda J. Smith

May 25, 2006

Date

Rhonda J. Smith Schlumberger Technology Corporation Schlumberger Reservoir Completions 14910 Airline Road Rosharon, Texas 77583-1590 (281) 285-5381 (281) 285-5537 Fax